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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WOOD, DAVID L

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/759,905	<b>Applicant(s)</b> WOODRUFF ET AL.	
	<b>Examiner</b> David L. Wood	<b>Art Unit</b> 3695	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-92 and 103-108 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-92, 103-108 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. Claims 91 and 92 are newly cancelled, in addition to previously cancelled claims 93-102. Claim 1 is amended, and claims 104-108 are newly added. Claims 1-90 and 103-108 are pending.
2. Newly amended claim 1 now includes this clause: “determining, by the computer system, a table of strike prices for a derivative contract included in said convertible debt hedge wherein the table includes strike prices at a plurality of different times from issuance of the convertible debt component to maturity of the derivative contract and wherein the computer system comprises a processor and a memory.” The original form of claim 1 included this clause, now deleted: “a derivative contract having a strike price structured to be adjusted up to a maturity date of said derivative contract.” The original specification uses approximately the same language about “adjusted” in paragraphs 0010, 0026, 0030, and at other places. However, original figure 5C, and paragraphs 0033 and 0045 describe a tabular approach to having predetermined, time-dependent strike prices tabulated and presented at issuance, establishing support in the original disclosure for this claim amendment.

### ***Response to Amendment***

3. The amendments to claim 1 are sufficient to overcome the Section 101 rejections of all claims, which are withdrawn.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1-90 and 103 have been considered but are moot in view of the new grounds of rejection. The applicant presents three basic arguments. The last two of these arguments are directed at the amended form of claim 1. The first argument, however, is directed at the previous references, and states that they do not disclose an "integrated aggregate transaction" where a convertible bond is combined with a hedge. It is pointed out that the Noreav reference discloses a convertible bond which is "linked" to a call option spread. It is noted that a call option spread is a type of hedge, and Noreav selected the call option spread to correspond to the underlying convertible bond, which is something that the claimed invention does not appear to require in claim 1 where the hedge appears to be able to be a hedge unrelated to the convertible debt. Thus, the foundation of the argument is that a debt which is "linked" to and sold with the debt is not an "integrated" transaction. Paragraph 0026 of the specification states this about the term "integrated":

"In various aspects, the convertible debt hedge 6 may be 'integrated' with the convertible debt component 4 in the aggregate transaction 2. The term 'integrated' as applied with respect to the relationship between the convertible debt component 4 and the convertible debt hedge 6 means that matched correspondence exists between one or more features of the convertible debt component 4 and one or more features of the convertible debt hedge 6."

Accordingly, there is nothing magical about "integrated" and the Examiner interprets the "linking" of Noreav to be essentially the same thing as the "integrated transaction" of the claimed invention. Although the Examiner finds Noreav to disclose the "integrated transaction" portion of the claimed invention, the claim amendments require new references, and at the same time the Examiner has chosen to rely on the Wong reference, which makes it much clearer that the two components are "integrated."

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong, et al., U.S. Pat. App. Pub. No. 2003/0028468, in view of Partlow, U.S. Pat. App. Pub. No. 2005/0216384, further in view of Business Wire, June 17, 2002.

7. As to claim 1:

- Wong discloses a convertible bond packaged in a customizable combination with a derivative security (abstract, summary, paragraphs 0010-12, figure 2 element 18):
  - *A computer-implemented method for facilitating an aggregate transaction, the method comprising: determining, by a computer system, a price for issuing, by an issuer, a convertible debt component issued by an issuer to at least one investor wherein the convertible debt component is integrated with a convertible debt*

*hedge entered into by the issuer with a counter-party to form an integrated aggregate transaction; and*

- Wong discloses integrating a derivative contract, but not a series of contracts with predetermined prices which can be selectively executed at a later time. A derivative contract with multiple strike prices can be conceived of as either a contract which can be modified to select which date the contract will be based on, or can be conceived of as a list of contracts for different dates where the contract is selected from the list at a later date. Partlow discloses both of these options at paragraphs 0134 and 0152:
  - *determining, by the computer system, a table of strike prices for a derivative contract included in said convertible debt hedge wherein the table includes strike prices at a plurality of different times from issuance of the convertible debt component to maturity of the derivative contract and wherein the computer system comprises a processor and a memory.*
- It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the combination instrument featuring an underlying security and a derivative related to that security, as disclosed in Wong, with the derivative security with a range of exercise dates and strike prices, as disclosed in Partlow, because their combination is a predictable use of prior art elements according to their established functions. The skilled artisan would be motivated to make the combination

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- because the Partlow option gives a much wider range of dates for an option which makes sense to combine with a convertible security where the date of conversion may be exercised at any time during a range of dates, so their combination may increase the attractiveness of the combination over other approaches such as a single fixed exercise date and strike price.
- It is common for a convertible debt security to include an anti-dilution provision, since executing the conversion option could create new shares of issued stock which would dilute the earnings of the entity. It is not common for a hedge, or derivative, such as a put or call option, to include an anti-dilution provision. When a put or call option are written the party who would provide the stock generally must obtain the stock from those already issued, unless the counterparty is the issuer, such as in an employee stock option (where anti-dilution provisions can be found). Although the specification is rather quiet on exactly what the hedge of the claim comprises, the specification does suggest one option is that it "includes" a derivative contract that may be a call option on the stock to which the convertible bond may convert. For example, paragraph 0030 includes this statement: "Establishing the derivative contract 10 may involve the issuer 102 purchasing one or more call options from the counter-party 106." In this case the counter-party would either need to own or acquire the stock of the call option, and thus it would not make sense to have an anti-dilution provision in this call option contract. One

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- way that the terms of the anti-dilution provision of the debt would match any anti-dilution provision of a hedge, such as a call option contract, would be if the terms are both essentially as silent as one would find in a call option contract. However, the language of the claim does not require that the hedge be a call option contract, or even a derivative, or even a “good” hedge. Neither Wong nor Partlow clearly include matching anti-dilution provisions, but Business Wire’s release about Advanced Biotherapy include two convertible debt issues with matching anti-dilution provisions:
- *wherein terms of an anti-dilution provision of said convertible debt hedge match terms of an anti-dilution provision of said convertible debt component*
  - It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the combination order of Wong and Partlow with the two convertible debt issues of Business Wire, using one as a hedge against the other, because their combination is a predictable use of prior art elements according to their established functions. The skilled artisan would be motivated to make the combination because there may be value to link the two issues together as an investment with hedge and using the Wong/Partlow system to link them into an integrated transaction would make the combination easier to market to some audiences who look for simple investments.



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8. Claims 2-14, 16-90, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong, Paltrow, and Business Wire, as applied to claim 1, further in view of Noraev, of record.

9. As to claims 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, and 92:

- Wong, Paltrow, and Business Wire disclose the limitations of claim 1.
- Neither Wong, Paltrow, nor Business Wire disclose, but Noraev discloses (column 7 lines 19-26):
  - *structuring said convertible debt hedge to permit said issuer to settle said convertible debt hedge with a payment selected from the group consisting of cash, an amount of an underlying security, and a combination of cash and an amount of underlying security to allow said convertible debt hedge to be accounted for as an equity instrument*
- It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Noraev innovations for hedges with the Wong/Paltrow/Business Wire system, because their combination is a predictable use of prior art elements according to their established functions. The skilled artisan would be motivated to make the combination because the added features would increase the attractiveness and flexibility of the combined instrument.

10. As to claims 3, 5, and 29, Wong discloses (abstract, summary):

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- *further comprising said derivative contract having at least one call option structured to be exercisable upon conversion of at least a portion of said convertible debt component by said investor.*

11. As to claims 17, 19, 43, 45, 59, 61, 77, and 79, Noraev discloses (column 2 lines 26-57, column 7 lines 19-26):

- wherein at least a maturity date of said derivative contract matches at least a put date of said convertible debt component
- wherein at least a maturity date of said derivative contract matches at least a maturity date of said convertible debt component

12. As to claims 21, 47, 63, and 81, Noraev discloses (at least claim 4):

- *wherein at least one underlying security feature of said derivative contract matches at least one underlying security feature of said convertible debt component*

13. As to claims 7, 35, and 53, and claims 9, 13, 37, and 69, it would be common sense for the skilled artisan to terminate the hedge, either automatically or at the discretion of the issuer, if the investor exercises a clause in the convertible bond to sell the bond back to the issuer as a result of a "change of control" condition, since the hedge protects in the case of the conversion of the debt to stock, and if the bond is returned to the issuer, this is essentially a moot situation. If the bond is sold back to the issuer, there would be no need for a hedge since the conversion wouldn't take place.

14. As to claims 11, 39, 55, 71, and 75, and claims 13, 41, 57, 73, and 89, it would be common sense for the skilled artisan to terminate the hedge, either

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automatically or at the discretion of the issuer, if the underlying bond experiences a condition of default which leads to the conversion option being cancelled, as is a customary term of convertible bonds. If the conversion option is cancelled, there would be no need for the hedge.

15. As to claims 23, 25, 27, 33, 49, 51, 65, 67, 83, 85, and 87, Noraev discloses (at least column 4 lines 9-18) a call spread option, which includes the call option and warrant.

16. As to claim 31, it would be common sense for the hedge to terminate if the conversion option is exercised at a time when the stock price is less than the strike price of the option, since the option would be worthless in that situation, and since the option is to protect for when the conversion happens at a higher stock price, the hedge would not survive into the future, but expire with the exercise of the option, even if not used at that time.

17. As to claim 103, Noraev discloses a computer network which would provide communication between the issuer and other parties (column 6 lines 40-64).

18. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wong, Paltrow, and Business Wire, as applied to claim 1, further in view of Hiatt, of record.

19. As to claim 15:

- Wong, Paltrow, and Business Wire disclose the limitations of claim 1.

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- Neither Wong, Paltrow, nor Business Wire discloses, but Hiatt discloses a variable strike price, which can adjust upwards over time (abstract, summary).
- It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Hiatt variable strike price to the Wong/Paltrow/Business Wire system, because their combination is a predictable use of prior art elements according to their established functions. The skilled artisan would be motivated to make the combination because with so many strike price dates, it would make sense to permit the prices to be varied over time to fine tune the prices to circumstances and make the investment attractive to investors and/or issuers.

20. Claims 104-108 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong, Paltrow, and Business Wire, as applied to claim 1, further in view of Harriman, "Documenting equity derivative transactions."

21. As to claim 104:

- Wong, Paltrow, and Business Wire disclose the limitations of claim 1.
- Neither Wong, Paltrow, nor Business Wire disclose, but Harriman discloses a consequence of merger clause which is included in convertible debt agreements:
  - *wherein terms of a consequence of merger provision of said convertible debt hedge match terms of a consequence of merger provision of said convertible debt component*

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- It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the Harriman consequence of merger provision for hedges to the Wong/Paltrow/Business Wire system, because their combination is a predictable use of prior art elements according to their established functions. The skilled artisan would be motivated to make the combination because any provisions or clauses that could be included in a pair of convertible debt agreements where one of the pair could form a hedge for the other would provide a clause that is commonly used in both agreements to maximize coverage of the clause and make the instrument more attractive to risk-averse investors.

22. Claim 107 is rejected using the combined reasoning of claim 1 and 104.

23. As to claims 105, 106, and 108, since ANY term in the agreement could exist in two convertible bonds used as an investment/hedge combination pair, the existence of a clause dealing with dilution suggests one dealing with concentrative events as well.

### ***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Wood whose telephone number is (571)270-3607. The examiner can normally be reached on Monday to Friday 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://www.uspto.gov>. If you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (in USA or Canada) or 571-272-1000.

/David L. Wood/  
Examiner, Art Unit 3695  
August 11, 2009

/Charles R. Kyle/  
Supervisory Patent Examiner, Art Unit 3695